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A note on the status of the name *Centrobolus* Cook, 1897 (Spirobolida: Pachybolidae)

By Richard L. Hoffman

ABSTRACT

Discovery of drawings of the male genitalia of *Spirobolus luctuosus* Peters, the type species of *Centrobolus* Cook, 1897, confirms the earlier assumption (Hoffman, 1971) that *Centrobolus* is the correct generic name for the numerous South African spiroboloids described under the name *Chersastus.*

The generic name *Centrobolus* was proposed by O. F. Cook in 1897 to accomodate the single species *Spirobolus luctuosus* Peters, 1855, from Inhambane, Mozambique. The name was diagnosed in a couplet of a key to the East African genera of Pachybolidae, in the following words:

> Copulatory legs as a whole longer than broad, the anterior lamellae close together, much exceeded by the produced apices of the posterior lamellae, which are armed on their posterior face with a distinct spine: Genus Centrobolus, *nov.*, type *C. luctuosus* (Peters), Mossambique.

This statement separated *Centrobolus* from the related genera *Pachybolus, Hadrobolus,* and *Epibolus,* of which the first two named were treated in detail and illustrated in Cook's subsequent paper (1899) on the species of *Pachybolus.* For reasons unknown to me, both *Centrobolus* and *Epibolus* were omitted, and in the absence of illustrations remained enigmas for many decades.

In writing about some South African spiroboloids some decades ago (1971) I perceived that these animals, all traditionally assigned to *Chersastus* (e. g., by Attems, 1928, Lawrence, 1967), were generically different from the type species of that name (*C. braueri* Attems, of the Seychelles). Rather than propose a new name

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for them, I took the option to resurrect *Centrobolus* for the reasons of geographic probability and Cook's statement that the telopodites of the anterior gonopods in *luctuosus* are ". . .armed on their posterior face with a distinct spine." Although this seemed a reasonable solution at the generic level, there remained the problem that would arise if - as seems possible - the South African contingent was divided into two or more genera. To which group then would *luctuosus* belong?

Regrettably, although the unique holotype of *luctuosus* remained available in the Berlin Museum, where I saw it in 1966, the genitalia had been removed and were nowhere to be found. Subsequent searches through Cook's milliped collection, which came to the U. S. National Museum following his demise in 1950, were also unsuccessful, and it seemed that the question would be frozen until somebody obtained topotypes at Inhambane.

In 1984, while assisting Dr. Jonathan Coddington in reorganizing the myriapod collections at the USNM, I serendipitiously discovered a large package of illustrations of gonopods made by Cook during the 1890s. In an envelope of unmounted drawings were three inked sketches of a spiroboloid, each identified in very small, very faint pencil words "luctuosus". As they agree in every detail with Cook's brief verbal account, I think there can be no doubt they were drawn from the missing gonopods. Even though the latter are still missing, at least we now have an idea of the specific attributes of this species. Peters' original description - in Latin - is very detailed and accurate, it omits only the distribution of tarsal pads along the body. The color, probably as in life, is given as *". . .ater, cingulorum mediorum nigrofuscus; margo labialis rufofuscus, pedes apicibus rufoflavidis."*

Reference to the treatments of the genus by Attems (1928), Schubart (1966), and Lawrence (1967) failed to produce a plausible close relative to *luctuosus* amongst known species. In general gonopod form, especially the apical lobes of the posterior gonopod, the closest matches are with *C. immaculatus* (Lawrence), from the mountainous western edge of Mozambique and adjacent Zimbabwe, and with *C. ruber vulpinus* (Attems), described from Xai-Xai, on the Mozambique coast not far south of Inhambane. From these, and apparently all other species, *luctuosus* seems to differ in the more proximal location of the laterally-directed process on the posterior face of the telopodite.

Despite the high quality and usefulness of the 1967 monograph by Lawrence, a revision of this genus following modern systematic concepts is a major *desideratum*.

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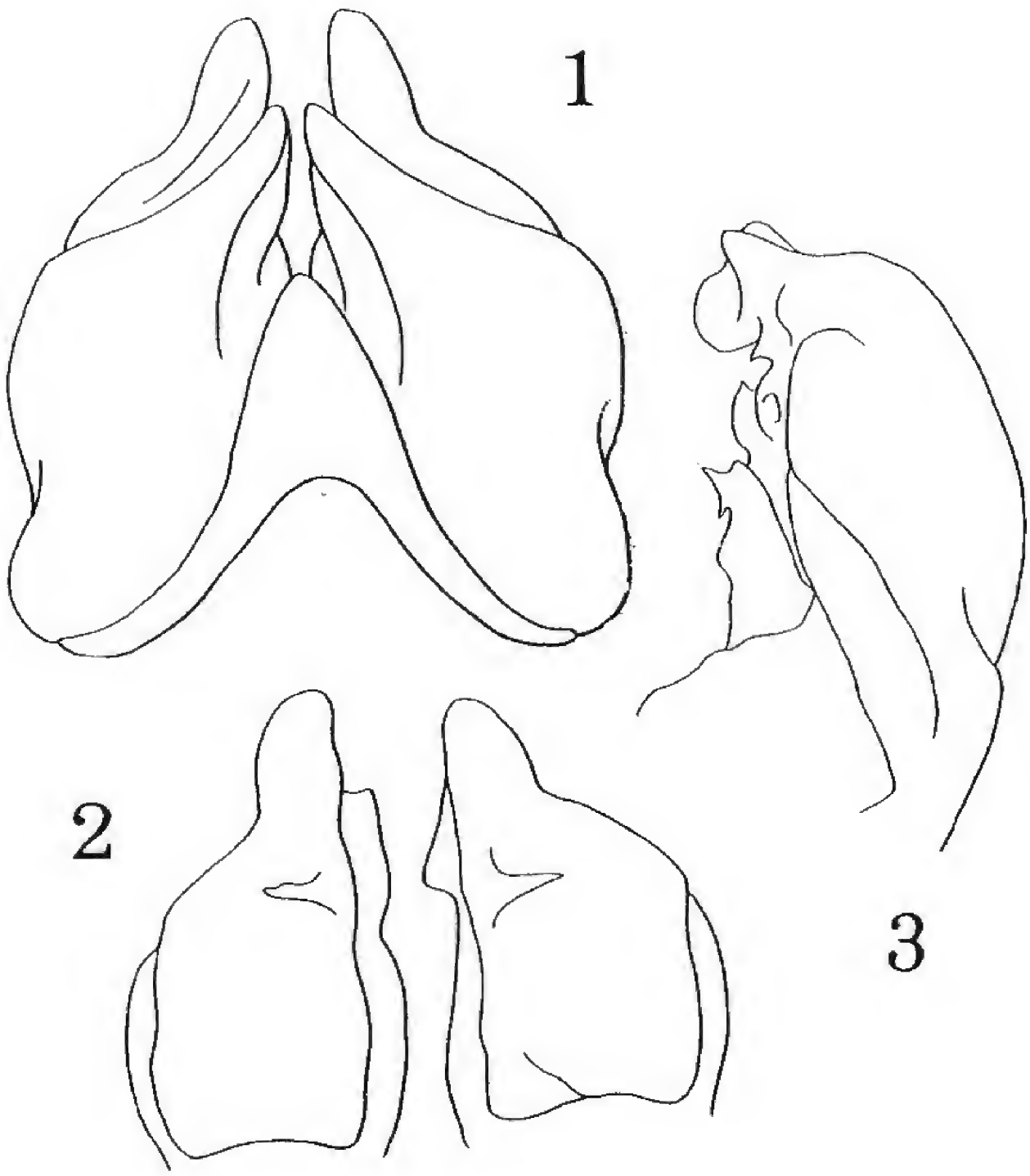

Figs. 1-3. Gonopods of *Centrobolus luctuosus* (Peters). Drawings from the holotype by O. F. Cook, ?1893. 1. Anterior gonopods, oral aspect. 2. Anterior gonopods, aboral aspect. 3. Posterior gonopod.

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Address of the author:

Dr. Richard L. Hoffman
Virginia Museum of Natural History
Martinsville, Virginia, 24112, U.S.A.